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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/670,529	09/27/2000	Yannick Albertone	AD6649 US NA	6969

23906 7590 03/26/2004

E I DU PONT DE NEMOURS AND COMPANY
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WILMINGTON, DE 19805

EXAMINER

BOYD, JENNIFER A

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/670,529

Applicant(s)

ALBERTONE ET AL.

Examiner

Jennifer A Boyd

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-2, 4-9, 11- 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-9, 11- 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 31, 2003 has been entered. Claims 1 – 2, 4 – 9 and 11 – 12 are pending. In view of the Applicant's Arguments, the Examiner withdraws all previously set forth rejections as detailed in paragraph 3 of the previous Office Action dated July 1, 2003. Despite these advances, the invention as currently claimed is not found to be patentable for reasons herein below.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1 – 2, 4 – 9 and 11 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beavers et al. (US 4,939,009) in view of Mueller (US 5,532,053).

Beavers is directed to a multilayered sheet having excellent adhesion which is useful as a carrier for decorative and protective coating to applied to substrates (Title and column 1, lines 10 – 23).

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As to claim 1, Beavers teaches a laminate comprising a layer of copolyetherester and a layer of polyolefin sandwiching a tie layer (Abstract). The tie layer comprises a low molecular weight polyethylene and about 0.1 to about 30 weight percent of vinyl acetate (column 5, lines 9 – 17). The copolyetherester layer is equated to Applicant's "copolyetherester layer", the polyolefin layer is equated to Applicant's "moisture vapor control layer" and the tie layer is equated to Applicant's "tie layer".

As to claim 2, Beavers teaches that the polyolefin layer can comprise polypropylene (column 4, lines 20 – 28).

As to claim 8, Beavers teaches that the tie layer comprises a low molecular weight polyethylene and about 0.1 to about 30 weight percent of vinyl acetate (column 5, lines 9 – 17).

As to claim 9, Beavers teaches that the layer of copolyetherester only comprises copolyetherester, therefore, the content is approximately 100%.

Beavers fails to teach that a substrate comprising a woven or non-woven material is attached to the moisture vapor control layer as required by claim 1. Beavers fails to disclose that the substrate comprising a woven or non-woven material comprises polyethylene, polypropylene, polyester, or blends thereof as required by claim 6. Beavers fails to teach that a second substrate and an adhesive or primer is adjacent to the copolyetherester layer as required by claim 12.

Mueller is directed to a high moisture transmission medical film. Mueller teaches a laminate film that comprises at least one layer formed from a first polyetherester copolymer, a second layer which can consist of an ethylene-vinyl acetate copolymer and a third layer (Abstract). Mueller notes that the laminate film can be bonded to one or more layers of

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polyesters, polyolefins, polyamides and non-woven fabrics (Abstract). Mueller teaches that the non-woven materials can be a polyolefin (column 7, lines 28 – 33) such as polypropylene or polyethylene. In order to improve bond strength, Mueller teaches that one or both of the non-woven materials used as substrates can be subjected to a corona treatment, or Applicant's "primer" (column 7, lines 40 – 50). It should be noted that Mueller teaches that the nonwoven material is a polyolefin but does not include a weight percentage, therefore, the purely polyolefin containing material implied by Mueller would meet the Applicant's requirements.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to attach a woven or non-woven substrate of polyolefin or polyester as suggested by Mueller to both sides of the laminate film of Beavers in order to reinforce the film and take advantage of the adhesive properties of the multilayer film to use in various end applications.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to treat the non-woven or woven fabric substrates with a corona treatment as suggested by Mueller when used to reinforce the multilayer film of Beavers motivated by the desire to increase bond strength (Mueller, column 7, lines 40 - 50).

As to claims 4 – 5, Beavers in view of Mueller fails to disclose the moisture vapor control layer has a thickness of 1 to 5 μm as required by claim 4 and the copolyetherester layer is from about 12 to 30 μm and the thickness of the tie layer is about 1 to 5 μm as required by claim 5. It should be noted that thickness is a result effective variable. For example, as the thickness increases, the material becomes less flexible and more durable. It would have been obvious to one having ordinary skill in the art at the time the invention was made to create the moisture

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vapor control layer with a thickness of 1 to 5 μm as required by claim 4 and the copolyetherester layer is from about 12 to 30 μm and the thickness of the tie layer is about 1 to 5 μm as required by claim 5 since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have been motivated to optimize the thickness of the layers and level of ethylene and acetate in the tie layer to have an effectively flexible and strong laminate with the desired properties.

As to claim 7, although Beavers in view of Mueller does not explicitly teach the claimed bond strength of at least 1 N/m, it would have been obvious to one of ordinary skill in the art to optimize the bond strength through the process of routine experimentation through such means as the selection of the components in the tie layer, process parameters, etc., in order to arrive at a strong material since these are known to be result effective variables.

As to claims 1 and 11, although Beavers in view of Mueller do not explicitly teach the claimed MVTR inequality and ratio, it is reasonable to presume that the MVTR is inherent to the laminate structure of Mueller in view of Beavers et al. Support for said presumption is found in the use of like materials and the use of like processes which would result in claimed MVTR inequality and ratio. The burden is upon Applicant to prove otherwise. Note *In re Fitzgerald* 205 USPQ 495. In addition, the presently claimed property of MVTR inequality and ratio would obviously have been present once the Beavers in view of Mueller product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

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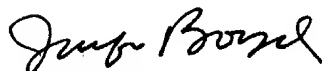
Response to Arguments


4. Applicant's arguments with respect to claims 1 - 2, 4 - 9 and 11 - 12 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jennifer Boyd
March 18, 2004


Ula C. Ruddock
Primary Examiner
Tech Center 1700